## Workshop on "Geometry of vector distributions, differential equations, and variational problems"

## SISSA, Trieste, Italy, 13–15 December 2006 Abstracts of the posters

## Relative local stability of for Engel structures Jiro Adachi Hokkaido University, Sapporo, Japan

It is well known that contact structures are locally stable (the Darboux theorem).

The germ of contact structures at a point in manifolds of the same dimension are the same up to local diffeomorphisms. The local stability of contact structures relative to submanifolds was studied by Arnold and Givental.

This result was generalized by Zhitomirskii. He studied the local stability of contact structures relative to subsets which may not be manifolds. On the other hand, it is known that Engel structures are locally stable. In this talk we study relative local stability of Engel structures.